

UCY-I3000

High Performance Industrial Grade 4G Wireless Router

Product Specifications



- Rich Data and Communication Interfaces
- External 6dBi Omni-Directional Antenna
- 1200Mbps Dual Band Access Point
- High Transmit Wi-Fi Power for Wider Coverage
- Built-in M.2 Connector Interface for 5G Cellular Modem Module Expansion

Product Description

UCY-I3000 is an industrial 4G wireless router that integrates multiple functions such as WIFI transmission, local resource sharing, cellular mobile Internet access, precise GPS positioning, serial port pass-thru transmission, and backend remote management. It provides more processing performance, richer interfaces and higher network connection speed than ordinary industrial routers. This product is suitable for different application types and scenarios, such as car WIFI, video transmission, PLC remote control, smart express cabinet, video surveillance, etc.

Product Features

- Dual-core processor, faster and more powerful processing speed
- 4G LTE modem Cat4, can be customized to Cat6 modem
- Industrial grade design, support use in high and cold temperature
- Full Metal enclosure, higher safety index, better corrosion resistance
- Gigabit Network Port Design for faster link communication
- Support network port function definition and customization
- Support Wi-Fi 802.11a/b/g/n/ac up to 1200Mbps max. data speed
- Maximum Wi-Fi user connection exceeds 60+
- Wide Power Voltage Design
- Linkable to external serial device
- USB2.0 high speed interface port
- Optional dedicated precise GPS positioning (optional)
- Hardware watchdog design supports auto recovery and prevent downtime

Main Features – Industrial Application Design

- Adopt high performance 32-bit dual-core network processor
- Wide voltage input design: 9 ~ 28V

- Industrial grade software and hardware watchdog design, trouble free and reliable operation in power station, transportation, and industrial control environment application
- Excellent electromagnetic, radiation, static protection ability
- Industrial grade EMC electromagnetic compatibility and radiation performance, passed the GB/T17626.5-2008 Level 4 test standard
- Industrial grade components, working temperature: -20 ~ +70°C
- Industrial enclosure, suitable for extreme environments
- Fan-less heat dissipation technology effectively reduces the failure rate of the equipment
- SIM card protection design
- Meet the trouble-free and reliable operation under vibration and shock environment

Main Features – Rugged, Stable and Reliable

- Dual watchdog design ensure that the stability of the system
- Apply complete anti-disconnection mechanism that to ensure the end data terminal is always online
- The product passed EMC test requirements
- The Ethernet interface built-in 1.5KV electromagnetic isolation protection GB/T17626.5-2008 (Level 4)
- SIM/UIM interface built-in 1.5KV ESD protection GB/T17626.5-2008 (Level 4)
- Built-in reserve phase protection and overvoltage protection for the power interface

Hardware Specifications

Main Hardware

CPU	MT7621A + MT7603EN + MT7613B
Flash	16MB (Optional 64MB)
RAM	DDR2 256MB (Optional 512MB)

4G/3G/2G Cellular Specifications

LTE Category	LTE Cat 4	
Frequency*	CN Version	LTE-FDD: B1, B3, B5, B8 LTE-TDD: B34, B38, B39, B40, B41 WCDMA: B1, B5, B8 GSM: B3, B8
	EU Version	LTE-FDD: B1, B3, B7, B8, B20, B28 LTE-TDD: B38, B40, B41 WCDMA: B1, B8 GSM: B3, B8
	LATAM/AU Version (Custom)	LTE-FDD: B1, B2, B3, B4, B5, B7, B8, B28, B66 LTE-TDD: B40 WCDMA: B1, B2, B4, B5, B8 GSM: B2, B3, B5, B8
Data Rate	LTE	LTE-FDD: Max. 150 (DL)/ Max. 50 (UL) LTE-TDD: Max. 130 (DL)/ Max. 30 (UL)
	DC-HSPA+	Max. 21 (DL)/ Max. 5.76 (UL)
	WCDMA	Max. 384 (DL)/ Max. 384 (UL)
	EDGE	Max. 236.8 (DL)/ Max. 236.8 (UL)
	GPRS	Max. 85.6 (DL)/ Max. 85.6 (UL)
Transmitting Power	Class 4 (33dBm±2dB) for EGSM900 Class 1 (30dBm±2dB) for DCS1800 Class E2 (27dBm±3dB) for EGSM900 8-PSK Class E2 (26dBm±3dB) for DCS1800 8-PSK Class 3 (24dBm+1/-3dB) for WCDMA bands Class 3 (23dBm±2dB) for LTE-FDD bands Class 3 (23dBm±2dB) for LTE-TDD bands	

Note *: The information about the supported standards and wireless bands may vary with the application of 4G modules. Before ordering, please ask and confirm with our sales representatives whether or not the required network standards and wireless frequency bands are met.

Wi-Fi Specifications

Wi-Fi Standard	Dual Band Wi-Fi, IEEE 802.11a/b/g/n/ac
Data Rate	IEEE 802.11b/g: Max 54Mbps IEEE 802.11n: Max. 300Mbps IEEE 802.11ac: Max 867Mbps
Encryption	WEP / WPA / WPA2
RF Power	20 ± 2dBm
Reception Sensitivity	<-72dBm @ 54Mbps

Interfaces

WAN	1 x 10/100M/1000M Ethernet Port, Auto MDI/MDIX, Built-in 1.5KV Electromagnetic Isolation Protection
LAN	4 x 10/100M/1000M Ethernet Port, Auto MDI/MDIX, Built-in 1.5KV Electromagnetic Isolation Protection
SIM Card	2 x Push-Push SIM card Slot
USB	1 x USB 2.0 Port
TF Storage	1 x TF Card Slot for Storage
UART	1 x RS232 or RS485 Serial Communication
Power	1 x Standard DC Connector, Built-in Power Reverse Protection
Antenna	1 x 4G Antenna 2 x 2.4GHz Wi-Fi Antenna 2 x 5GHz Wi-Fi Antenna 1 x GPS Antenna (Optional)
LED Indicators	1 x SYS System Status Indicator 4 x LAN Ethernet Status indicator 1 x WAN Ethernet Status Indicator 2 x WIFI Status Indicator 1 x NET Internet Indicator 1 x GPS Status Indicator
Reset	1 x Pin-hole Reset Button

Power Supply

Input Power	DC 12V/1.5A
Power Range	DC 9~28V
Power Consumption	4.2W (Idle), Max 10W (Full)

Physical Properties

Enclosure	Metal Enclosure, Industrial Protection Grade IP30. The enclosure and the system are safely isolated, and are widely used in automotive and specific industrial applications.
Dimensions	200mm x 141mm x 28mm (Excluding Antennas)
Weight	920g

Environments

Operating Temperature	-30°C to +70°C
Storage Temperature	-40°C to +90°C
Humidity	95% (non-condensing)

Software Specifications

Main Features	WAN	Static IP, DHCP, PPPoE
		Support Links Redundancy, and WAN-WWAN Failsafe
		Link detection, Heartbeat detection, and auto reconnection
	WIFI	Client, AP, Router Mode
		Support WPA/WPA2 Encryption, MAC Filter and others
	VPN	Support VPN Client PPTP / L2TP
	Management	SYSLOG / HTTP / Other Functions

		Support Local or Remote Firmware Upgrade, Import / Export configuration file
	Support APN/VPDN	
	Support IPv6	
	Support NTP	
	Support VLAN, MAC Address Clone	
	Support Multiple DHCP Server, DHCP Client, DHCP and MAC Address Binding, DDNS, Firewall, DMZ, Traffic Statistics and others	
	Support TCP/IP, UDP, FTP(optional), HTTP and Other Network Protocols	
	Support Multiple Serial Pass-through Method, UDP Client, TCP Client, Server	

Product Views



Order Information

Order Code	Product Description
UCY-I3000	1 x I3000 Wireless Router unit 1 x Spring Magnetic Antenna (4G) 2 x Dipole/Rubber-Duck Antenna (2.4GHz Wi-Fi) 2 x Dipole/Rubber-Duck Antenna (5GHz WI-FI) 1 x GPS Antenna (Optional) 1 x AC/DC Power Adapter 1 x Network Cable